

Gasket, Packing, and Sealing Device Manufacturing: 2002

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2002 Economic Census

Manufacturing

Industry Series



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U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU



Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)					
339991, Gasket, packing, and sealing device manufacturing	2002..	522	614	37 851	1 343 595	27 740	54 555	795 356	3 100 875	2 178 460	5 273 766	222 643
	2001..	N	N	41 171	1 452 523	29 922	60 115	852 495	3 337 269	2 545 552	5 878 049	215 415
	2000..	N	N	43 700	1 516 323	32 054	63 375	893 111	3 884 127	2 803 506	6 673 288	252 986
	1999..	N	N	42 656	1 381 354	31 022	63 533	826 095	3 132 248	2 230 501	5 376 990	228 488
	1998..	N	N	42 607	1 330 897	30 495	61 844	797 676	3 197 564	2 175 933	5 419 356	244 487
	1997..	561	666	41 980	1 290 903	30 034	62 458	762 912	3 132 922	2 105 772	5 243 005	203 930

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
339991, Gasket, packing, and sealing device manufacturing												
United States	1	614	302	37 851	1 343 595	27 740	54 555	795 356	3 100 875	2 178 460	5 273 766	222 643
Alabama	1	6	5	674	20 687	554	966	14 014	61 121	50 497	111 552	4 398
California	1	72	36	3 259	116 300	2 394	4 410	70 168	278 019	123 813	411 000	10 178
Connecticut	1	15	7	697	24 667	523	1 074	14 048	48 154	26 091	75 027	3 107
Illinois	—	37	18	3 792	150 591	2 849	4 722	83 107	246 062	247 916	497 652	14 926
Kansas	—	5	2	299	7 711	250	492	5 618	31 052	20 119	51 176	588
Kentucky	—	8	6	843	33 339	566	1 135	16 651	71 872	60 177	130 656	22 485
Louisiana	4	9	4	274	10 184	183	310	3 937	22 161	14 373	36 484	1 044
Massachusetts	3	22	8	1 239	53 614	685	1 396	22 342	143 440	67 927	212 046	4 940
Michigan	4	26	15	907	34 057	607	1 270	18 153	76 227	43 975	120 358	2 871
Minnesota	1	20	11	938	34 374	705	1 454	21 171	87 133	40 162	126 730	6 710
Missouri	—	12	3	295	10 200	186	358	5 067	26 284	15 191	42 362	1 064
New Jersey	3	27	15	1 187	44 199	799	1 549	23 219	90 273	60 583	151 239	5 616
New York	—	28	15	2 975	99 076	2 202	4 138	55 094	214 044	169 744	383 332	8 234
North Carolina	—	11	7	657	21 353	477	953	12 722	66 991	57 405	124 099	2 726
Ohio	1	43	21	2 864	106 568	2 077	4 292	66 277	218 312	141 518	356 817	13 696
Pennsylvania	4	36	13	1 377	54 152	838	1 627	23 526	99 424	63 527	163 919	6 558
Rhode Island	—	6	4	398	20 460	230	439	10 651	37 370	16 086	53 069	2 164
South Carolina	1	7	3	915	29 953	773	1 538	21 539	65 087	45 417	110 850	6 922
Tennessee	—	14	11	1 253	41 107	997	1 977	27 430	86 170	102 674	180 608	2 177
Texas	4	68	35	3 397	113 389	2 509	4 977	67 214	273 973	233 646	503 868	15 805
Washington	1	10	3	170	5 845	115	194	3 221	10 832	5 760	16 608	429
Wisconsin	1	18	5	729	27 495	570	1 163	17 791	49 030	35 707	83 692	2 344

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
339991, Gasket, packing, and sealing device manufacturing	
Companies ¹	number.. 522
All establishments ²	number.. 614
Establishments with 1 to 19 employees	number.. 312
Establishments with 20 to 99 employees	number.. 200
Establishments with 100 employees or more	number.. 102
All employees ³	number.. 37 851
Total compensation	\$1,000.. 1 714 508
Annual payroll	\$1,000.. 1 343 595
Total fringe benefits	\$1,000.. 370 913
Production workers, average for year	number.. 27 740
Production workers on March 12	number.. 28 087
Production workers on May 12	number.. 28 266
Production workers on August 12	number.. 27 754
Production workers on November 12	number.. 26 810
Production worker hours	1,000.. 54 555
Production worker wages	\$1,000.. 795 356
Total cost of materials	\$1,000.. 2 178 460
Materials, parts, containers, packaging, etc., used	\$1,000.. 1 915 793
Resales	\$1,000.. 127 306
Purchased fuels	\$1,000.. 19 301
Purchased electricity	\$1,000.. 67 952
Contract work	\$1,000.. 48 108
Quantity of electricity purchased for heat and power	1,000 kWh.. 1 030 393
Quantity of electricity generated less sold for heat and power	1,000 kWh.. -
Total value of shipments	\$1,000.. 5 273 766
Primary products value of shipments	\$1,000.. 4 673 481
Secondary products value of shipments	\$1,000.. 384 215
Total miscellaneous receipts	\$1,000.. 216 070
Value of resales	\$1,000.. 164 677
Contract receipts	\$1,000.. 11 694
Other miscellaneous receipts	\$1,000.. 39 699
Primary products specialization ratio	percent.. 92
Value of primary products shipments made in all industries	\$1,000.. 4 986 700
Value of primary products shipments made in this industry	\$1,000.. 4 673 481
Value of primary products shipments made in other industries	\$1,000.. 313 219
Coverage ratio	percent.. 94
Value added	\$1,000.. 3 100 875
Total inventories, beginning of year	\$1,000.. 580 054
Finished goods inventories	\$1,000.. 281 481
Work-in-process inventories	\$1,000.. 110 682
Materials and supplies inventories	\$1,000.. 187 891
Total inventories, end of year	\$1,000.. 589 064
Finished goods inventories	\$1,000.. 284 873
Work-in-process inventories	\$1,000.. 112 859
Materials and supplies inventories	\$1,000.. 191 332
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 2 220 690
Total capital expenditures (new and used)	\$1,000.. 222 643
Buildings and other structures (new and used)	\$1,000.. 36 031
Machinery and equipment (new and used)	\$1,000.. 186 612
Automobiles, trucks, etc., for highway use	\$1,000.. 6 827
Computers and peripheral data processing equipment	\$1,000.. 19 447
All other expenditures for machinery and equipment	\$1,000.. 160 338
Total retirements	\$1,000.. 144 446
Gross value of depreciable assets at end of year	\$1,000.. 2 298 887
Depreciation charges during year	\$1,000.. 183 517
Total rental payments	\$1,000.. 60 813
Buildings and other structures	\$1,000.. 42 062
Machinery and equipment	\$1,000.. 18 751
Total other expenses ⁴	\$1,000.. 408 965
Response coverage ratio ⁵	percent.. 83
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 35 563
Communications services ⁴	\$1,000.. 14 469
Legal services ⁴	\$1,000.. 4 616
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 4 392
Advertising and promotional services ⁴	\$1,000.. 5 696
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 9 551
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 12 310
Management consulting and administrative services ⁴	\$1,000.. 8 306
Taxes and license fees ⁴	\$1,000.. 18 873
All other expenses ⁴	\$1,000.. 295 190

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
339991, Gasket, packing, and sealing device manufacturing											
All establishments	1	614	37 851	1 343 595	27 740	54 555	795 356	3 100 875	2 178 460	5 273 766	222 643
Establishments with—											
1 to 4 employees	8	105	217	7 010	164	317	4 388	16 352	8 669	25 081	891
5 to 9 employees	6	76	512	18 163	389	781	11 209	44 898	26 589	71 587	2 433
10 to 19 employees	4	131	1 782	66 685	1 211	2 442	36 046	144 774	100 594	246 417	8 743
20 to 49 employees	2	140	4 435	156 315	2 973	5 945	81 031	337 420	241 658	578 913	31 537
50 to 99 employees	1	60	4 111	145 219	2 833	5 553	76 933	317 929	242 255	565 250	14 006
100 to 249 employees	—	70	11 158	387 622	8 345	16 949	237 445	1 062 165	622 561	1 672 652	97 282
250 to 499 employees	2	22	7 478	263 992	5 765	10 964	171 361	674 227	567 425	1 238 811	33 062
500 to 999 employees	1	8	i	D	D	D	D	D	D	D	D
1,000 to 2,499 employees	—	2	h	D	D	D	D	D	D	D	D
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	198	1 106	37 564	856	1 762	24 087	82 806	46 987	129 791	4 764

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
339991	Gasket, packing, and sealing device manufacturing	614	37 851	1 343 595	27 740	54 555	795 356	3 100 875	2 178 460	5 273 766	222 643
3399911	Compression packings	15	2 250	57 153	1 820	3 316	33 998	133 839	110 757	241 349	8 493
3399913	Nonmetallic gaskets and gasketing ..	133	11 208	404 645	8 054	15 327	231 558	945 045	814 523	1 752 671	42 876
3399915	Molded packings and seals	92	10 610	365 717	7 979	15 721	229 602	823 053	549 497	1 373 188	70 251
3399917	Metallic gaskets and machined seals	41	4 927	204 645	3 055	6 456	94 108	479 548	266 255	749 349	18 245
3399918	Axial mechanical face seals, including parts	17	1 426	57 638	970	1 858	34 711	136 523	61 143	194 638	20 706
3399919	Rotary oil seals	16	3 779	124 569	3 199	6 399	94 976	303 508	214 399	519 576	37 526

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
339991	Gasket, packing, and sealing device manufacturing	2002.. N	X	X	4 986 700
	1997.. N		X	X	4 867 527
3399911	Compression packings	2002.. N	X	X	195 958
	1997.. N		X	X	208 499
33999111	Compression packings	2002.. N	X	X	192 958
	1997.. N		X	X	207 465
339991111	Synthetic fiber and plastics composition compression packings	2002.. 20	X	X	122 324
	1997.. 28		X	X	126 288
339991112	Other compression packings	2002.. 16	X	X	70 634
	1997.. 17		X	X	81 177
3399911Y	Compression packings, nsk	2002.. N	X	X	3 000
	1997.. N		X	X	1 034
3399911YWV	Compression packings, nsk	2002.. N	X	X	3 000
	1997.. N		X	X	1 034
3399913	Nonmetallic gaskets and gasketing	2002.. N	X	X	1 444 061
	1997.. N		X	X	1 279 526
33999131	Elastomeric gaskets and gasketing	2002.. N	X	X	479 986
	1997.. N		X	X	354 494
339991311	Elastomeric gaskets and gasketing	2002.. 103	X	X	479 986
	1997.. 115		X	X	354 494
33999132	Graphite gaskets and gasketing	2002.. N	X	X	181 342
	1997.. N		X	X	74 231
339991322	Graphite gaskets and gasketing	2002.. 28	X	X	181 342
	1997.. 23		X	X	74 231
33999133	Nonmetallic gaskets and gasketing	2002.. N	X	X	763 558
	1997.. N		X	X	784 918
339991333	Paper, felt base, and plant fiber gaskets and gasketing	2002.. 42	X	X	163 163
	1997.. 53		X	X	100 170
339991334	Cork and cork composition gaskets and gasketing	2002.. 26	X	X	33 960
	1997.. 34		X	X	46 617
339991335	Other nonmetallic gaskets and gasketing	2002.. 97	X	X	566 435
	1997.. 105		X	X	638 131
3399913Y	Nonmetallic gaskets and gasketing, nsk	2002.. N	X	X	19 175
	1997.. N		X	X	65 883
3399913YWV	Nonmetallic gaskets and gasketing, nsk	2002.. N	X	X	19 175
	1997.. N		X	X	65 883
3399915	Molded packings and seals	2002.. N	X	X	1 324 420
	1997.. N		X	X	1 066 901
33999151	Molded O-rings, including spliced O-rings	2002.. N	X	X	420 943
	1997.. N		X	X	318 998
339991511	Molded O-rings, including spliced O-rings	2002.. 59	X	X	420 943
	1997.. 58		X	X	318 998
33999152	Other molded packings and seals	2002.. N	X	X	852 199
	1997.. N		X	X	707 353
339991522	Other molded squeeze-type solid-section ring seals, including D-rings, quad seals, rectangular seals, and T-rings (excluding O-rings)	2002.. 36	X	X	78 891
	1997.. 22		X	X	68 554
339991523	Molded dual-component cushioned ring flexible seals that are backed, constrained, or loaded by an elastomeric ring	2002.. 14	X	X	76 061
	1997.. 20		X	X	78 483
339991524	Molded single-component and multiple-component lip-type flexible seals, including collar seals, cup seals, flange seals, single-lip nonsymmetrical seals, U-cups, V-rings, and V-ring sets	2002.. 41	X	X	263 886
	1997.. 42		X	X	171 809
339991525	Molded diaphragm seals	2002.. 25	X	X	89 638
	1997.. 26		X	X	67 329
339991526	All other molded packings and seals, including leather and plastics seals and nonmetallic exclusion devices	2002.. 51	X	X	343 723
	1997.. 76		X	X	321 178
3399915Y	Molded packings and seals, nsk	2002.. N	X	X	51 278
	1997.. N		X	X	40 550
3399915YWV	Molded packings and seals, nsk	2002.. N	X	X	51 278
	1997.. N		X	X	40 550
3399917	Metallic gaskets and machined seals	2002.. N	X	X	820 765
	1997.. N		X	X	873 404
33999171	Metallic gaskets and machined seals	2002.. N	X	X	816 185
	1997.. N		X	X	844 681
339991711	Metallic spiral-wound gaskets	2002.. 15	X	X	68 125
	1997.. 14		X	X	45 307
339991712	Other metallic gaskets and machined seals, including metallic exclusion devices	2002.. 55	X	X	748 060
	1997.. 71		X	X	799 374
3399917Y	Metallic gaskets and machined seals, nsk	2002.. N	X	X	4 580
	1997.. N		X	X	28 723
3399917YWV	Metallic gaskets and machined seals, nsk	2002.. N	X	X	4 580
	1997.. N		X	X	28 723
3399918	Axial mechanical face seals, including parts	2002.. N	X	X	204 135
	1997.. N		X	X	257 291
33999181	Complete axial mechanical face seals	2002.. N	X	X	D
	1997.. N		X	X	211 573
339991811	Complete axial mechanical face seals with single-coil springs	2002.. 8	X	X	74 975
	1997.. 7		X	X	63 764
339991812	Complete axial mechanical face seals with multiple-coil springs	2002.. 12	X	X	34 262
	1997.. 6		X	X	30 157
339991813	Complete axial mechanical face seals with bellows	2002.. 6	X	X	D
	1997.. 4		X	X	83 063
339991814	Other complete axial mechanical face seals, including clearance and labyrinth axial mechanical face seals	2002.. 6	X	X	D
	1997.. 7		X	X	34 589
33999182	Parts for axial mechanical face seals	2002.. N	X	X	D
	1997.. N		X	X	43 843
339991825	Parts for axial mechanical face seals	2002.. 5	X	X	D
	1997.. 8		X	X	43 843

See footnotes at end of table.

Table 6a. Products Statistics: 2002 and 1997—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
339991	Gasket, packing, and sealing device manufacturing—Con.				
3399918	Axial mechanical face seals, including parts—Con.				
3399918Y	Axial mechanical face seals, including parts, nsk	2002.. N	X	X	4 335
		1997.. N	X	X	1 875
3399918YV	Axial mechanical face seals, including parts, nsk	2002.. N	X	X	4 335
		1997.. N	X	X	1 875
3399919	Rotary oil seals	2002.. N	X	X	558 796
		1997.. N	X	X	684 255
33999191	Rotary oil seals	2002.. N	X	X	540 952
		1997.. N	X	X	673 467
3399919111	Sprung (spring-loaded) bonded rotary oil seals	2002.. 12	X	X	274 095
		1997.. 7	X	X	343 603
3399919141	Nonmetallic rotary oil seals	2002.. 5	X	X	26 342
		1997.. 3	X	X	34 409
3399919161	Other rotary oils seals, including unsprung bonded, displacement, inflatable, labyrinth, boundary lubrication, all-metallic, nonbonded-assembled, proximity, and unitized rotary oil seals	2002.. 9	X	X	240 515
		1997.. N	X	X	N
3399919Y	Rotary oil seals, nsk	2002.. N	X	X	17 844
		1997.. N	X	X	10 788
3399919YV	Rotary oil seals, nsk	2002.. N	X	X	17 844
		1997.. N	X	X	10 788
339991W	Gasket, packing, and sealing device manufacturing, nsk, total	2002.. N	X	X	438 565
		1997.. N	X	X	497 651
339991WY	Gasket, packing, and sealing device manufacturing, nsk, total	2002.. N	X	X	438 565
		1997.. N	X	X	497 651
339991WYWW	Gasket, packing, and sealing device manufacturing, nsk, for nonadministrative-record establishments	2002.. N	X	X	313 241
		1997.. N	X	X	378 751
339991WYWY	Gasket, packing, and sealing device manufacturing, nsk, for administrative-record establishments	2002.. N	X	X	125 324
		1997.. N	X	X	118 900

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p–10 to 19 percent estimated; q–20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3399911	Compression packings	
	United States.....	2002.. 195 958
		1997.. 208 499
	Illinois	2002.. 5 534
		1997.. 6 351
	Ohio	2002.. 2 162
		1997.. N
	Pennsylvania.....	2002.. 4 704
3399913	Nonmetallic gaskets and gasketing	
	United States.....	2002.. 1 444 061
		1997.. 1 279 526
	California	2002.. 66 548
		1997.. 77 435
	Connecticut	2002.. 7 706
		1997.. 5 944
	Illinois	2002.. 204 522
3399915	Molded packings and seals	
	United States.....	2002.. 1 324 420
		1997.. 1 066 901
	California	2002.. 108 289
		1997.. 161 042
	Connecticut	2002.. 25 811
		1997.. 24 259
	Illinois	2002.. 71 577
3399917	Metallic gaskets and machined seals	
	United States.....	2002.. 820 765
		1997.. 873 404
	California	2002.. 91 923
		1997.. 27 323
	Connecticut	2002.. 26 413
		1997.. 26 486
	Illinois	2002.. 136 859
3399918	Axial mechanical face seals, including parts	
	United States.....	2002.. 204 135
		1997.. 257 291
	Texas	2002.. 11 293
		1997.. 31 568

See footnotes at end of table.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997—Con.**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3399919	Rotary oil seals	
	United States..... 2002..	558 796
	..... 1997..	684 255
	California 2002..	2 571
	..... 1997..	6 732
	Illinois 2002..	31 826
	..... 1997..	N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
339991	Gasket, packing, and sealing device manufacturing		
0090001	Total materials .....2002..	X	1 915 793
	.....1997..	X	1 752 739
32199901	Cork products .....2002..	X	14 036
	.....1997..	X	23 648
32212029	Building paper and board .....2002..	X	40 760
	.....1997..	X	52 926
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....2002..	X	121 914
	.....1997..	X	130 979
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....2002..	X	35 126
	.....1997..	X	N
32521204	Synthetic rubber .....2002..	X	221 281
	.....1997..	X	N
11321001	Natural rubber .....2002..	X	36 012
	.....1997..	X	37 380
32600017	Fabricated rubber products (excluding tires, tubes, hose, belting, and gaskets) .....2002..	X	60 532
	.....1997..	X	70 989
33999103	Gaskets (all types), and packing and sealing devices .....2002..	X	244 637
	.....1997..	X	N
33261003	Fabricated metal wire products (including wire rope, cable, springs, etc.) .....2002..	X	47 922
	.....1997..	X	N
33200015	All other fabricated metal products (including forgings) .....2002..	X	113 831
	.....1997..	X	126 049
33120012	Steel tinplate, tin free steel, terneplate, and blackplate .....2002..	X	37 306
	.....1997..	X	N
33120077	All other steel shapes and forms (excluding forgings and fabricated metal products) .....2002..	X	85 827
	.....1997..	X	102 631
32799213	Natural graphite .....2002..	X	41 664
	.....1997..	X	29 593
32799201	Carbon, ground or treated .....2002..	X	20 847
	.....1997..	X	30 051
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	511 008
	.....1997..	X	911 419
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	283 090
	.....1997..	X	237 074

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.